DOCUMENT RESUME

ED 149 091 08 CE 014 327

TITLE	Professional Teacher Education Module Series. Present Information with Televised and Videotaped Materials, Module C-27 of Category C--Instructional Execution.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	77
NOTE	39p.; For related documents see CE 011 532, CE 011 534, CE 014 295-355, CE 014 358 (student guide), CE 014 588 (resource person's guide), CE 014 532-539, and CE 014 589-591
AVAILABLE FROM	American Association for Vocational Instructional Materials (AAVIM), 120 Engineering Center, University of Georgia, Athens, Georgia 30602 ($2.30)
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Audio Equipment; Audiovisual Aids; Audio Visual Instruction; Broadcast Reception Equipment; Classroom Techniques; Educational Strategies; Equipment Utilization; Film Production; Individualized Curriculum; *Learning Activities; Learning Experience; Learning Modules; Performance Based Teacher Education; Photographic Equipment; Post Secondary Education; Projection Equipment; Secondary Education; Tape Recordings; Teacher Education Curriculum; *Teaching Methods; *Teaching Skills; Teaching Techniques; *Television; Video Cassette Systems; Video Equipment; *Video Tape Recordings; *Vocational Education

ABSTRACT

This twenty-seventh in a series of twenty-nine learning modules on instructional execution is designed to give secondary and postsecondary vocational teachers help in developing the competencies needed to operate videotape recording equipment and to use television and videotape productions in the classroom or laboratory effectively. Introductory sections relate the competencies dealt with here to others in the program and list both the enabling objectives for the three learning experiences and the resources required. Materials in the learning experiences include required reading, worksheets, performance checklists, and the teacher performance assessment form for use in evaluation of the terminal objective. (The modules on instructional execution are part of a larger series of 100 field-tested performance-based teacher education (PBTE) self-contained learning packages for use in preservice or inservice training of teachers in all occupational areas. Materials are designed for use by teachers, either on an individual or group basis, working under the direction of one or more resource persons/instructors.) (BM)

ED149091

MODULE

C-27

Present Information with Televised and Videotaped Materials

MODULE C-27 OF CATEGORY C—INSTRUCTIONAL EXECUTION
PROFESSIONAL TEACHER EDUCATION MODULE SERIES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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1977

ISBN 0-914452-96-7

Published and distributed by the **American Association for Vocational Instructional Materials (AAVIM),** 120 Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586.

CE 014 337

FOREWORD

This module is one of a series of 100 performance-based teacher education (PBTE) learning packages focusing upon specific professional competencies of vocational teachers. The competencies upon which these modules are based were identified and verified through research as being important to successful vocational teaching at both the secondary and post-secondary levels of instruction. The modules are suitable for the preparation of teachers in all occupational areas.

Each module provides learning experiences that integrate theory and application; each culminates with criterion referenced assessment of the teacher's performance of the specified competency. The materials are designed for use by individual or groups of teachers in training working under the direction and with the assistance of teacher educators acting as resource persons. Resource persons should be skilled in the teacher competency being developed and should be thoroughly oriented to PBTE concepts and procedures in using these materials.

The design of the materials provides considerable flexibility for planning and conducting performance-based preservice and inservice teacher preparation programs to meet a wide variety of individual needs and interests. The materials are intended for use by universities and colleges, state departments of education, post-secondary institutions, local education agencies, and others responsible for the professional development of vocational teachers. Further information about the use of the modules in teacher education programs is contained in three related documents: **Student Guide to Using Performance-Based Teacher Education Materials, Resource Person Guide to Using Performance-Based Teacher Education Materials** and **Guide to Implementation of Performance-Based Teacher Education.**

The PBTE curriculum packages are products of a sustained research and development effort by The Center's Program for Professional Development for Vocational Education. Many individuals, institutions, and agencies participated with The Center and have made contributions to the systematic development, testing, revision, and refinement of these very significant training materials. Over 40 teacher educators provided input in development of initial versions of the modules; over 2,000 teachers and 300 resource persons in 20 universities, colleges, and post-secondary institutions used the materials and provided feedback to The Center for revision and refinement.

Special recognition for major individual roles in the direction, development, coordination of testing, revision, and refinement of these materials is extended to the following program staff: James B. Hamilton, Program Director; Robert E. Norton, Associate Program Director; Glen E. Fardig, Specialist; Lois Harrington, Program Assistant; and Karen Quinn, Program Assistant. Recognition is also extended to Kristy Ross, Technical Assistant; Joan Jones, Technical Assistant; and Jean Wisenbaugh, Artist for their contributions to the final refinement of the materials. Contributions made by former program staff toward developmental versions of these materials are also acknowledged. Calvin J. Cotrell directed the vocational teacher competency research studies upon which these modules are based and also directed the curriculum development effort from 1971–1972. Curtis R. Finch provided leadership for the program from 1972–1974.

Appreciation is also extended to all those outside The Center (consultants, field site coordinators, teacher educators, teachers, and others) who contributed so generously in various phases of the total effort. Early versions of the materials were developed by The Center in cooperation with the vocational teacher education faculties at Oregon State University and at the University of Missouri-Columbia. Preliminary testing of the materials was conducted at Oregon State University, Temple University, and University of Missouri-Columbia.

Following preliminary testing, major revision of all materials was performed by Center staff with the assistance of numerous consultants and visiting scholars from throughout the country.

Advanced testing of the materials was carried out with assistance of the vocational teacher educators and students of Central Washington State College; Colorado State University; Ferris State College, Michigan; Florida State University; Holland College, P.E.I., Canada; Oklahoma State University; Rutgers University; State University College at Buffalo; Temple University; University of Arizona; University of Michigan-Flint; University of Minnesota-Twin Cities; University of Nebraska-Lincoln; University of Northern Colorado; University of Pittsburgh; University of Tennessee; University of Vermont; and Utah State University.

The Center is grateful to the National Institute of Education for sponsorship of this PBTE curriculum development effort from 1972 through its completion. Appreciation is extended to the Bureau of Occupational and Adult Education of the U.S. Office of Education for their sponsorship of training and advanced testing of the materials at 10 sites under provisions of EPDA Part F, Section 553. Recognition of funding support of the advanced testing effort is also extended to Ferris State College, Holland College, Temple University, and the University of Michigan-Flint.

Robert E. Taylor
Director
The Center for Vocational Education

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University 1960 Kenny Road Columbus Ohio 43210

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning and preparation. The Center fulfills its mission by:

- Generating knowledge through research.
- Developing educational programs and products.
- Evaluating individual program needs and outcomes.
- Installing educational programs and products.
- Operating information systems and services.
- Conducting leadership development and training programs.

AA VIM

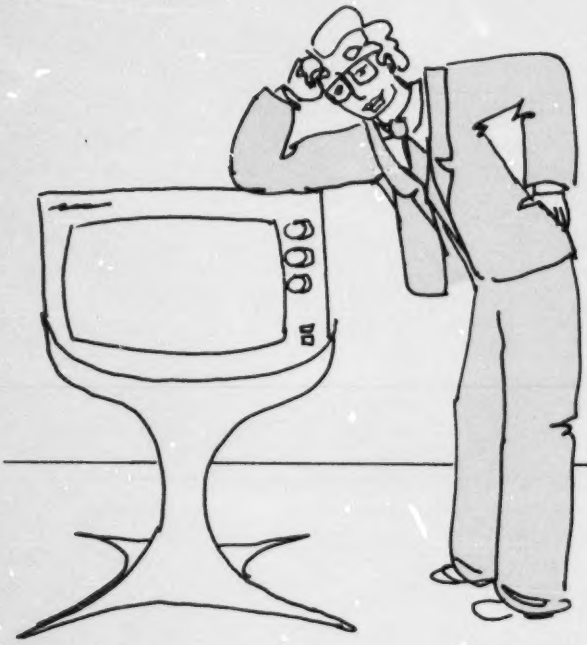
AMERICAN ASSOCIATION FOR VOCATIONAL INSTRUCTIONAL MATERIALS

Engineering Center
Athens, Georgia 30602

The American Association for Vocational Instructional Materials (AAVIM) is an interstate organization of universities, colleges and divisions of vocational education devoted to the improvement of teaching through better information and teaching aids.

INTRODUCTION

It is widely agreed that commercial television has had an enormous impact on the development of American youth. Now vocational teachers can bring the impact of television into the classroom through the use of televised and videotaped materials. Television's sense of immediacy, accessibility, and ability to involve the viewer with sight and sound can be used by the teacher to facilitate student learning. In addition, television permits the easy storage of information for future use in learning activities.



By recording on tape the video image, you, as a vocational teacher, can add to your teaching repertoire or skills in a number of creative ways. You can tape record demonstrations, show close-ups of detailed operations, and extend the classroom experience by recording otherwise unavailable guest speakers or field trips. Television broadcasts and videotape recordings help you increase both instructional effectiveness and teacher efficiency.

Producing videotape recordings is a skill that is relatively easy for you to learn and use. The effort expended in becoming proficient may be greatly repaid in improved classroom and laboratory management. If you are in an open entry/open exit and competency-based program, for example, you will find that videotaped lessons and demonstrations are invaluable in managing your instructional programs. You can also tape record your own performance to help you objectively evaluate your teaching and improve your own professional performance.

This module is designed to give you skill in using television in the classroom. It will help you learn how to operate the videotape recording equipment that is typically available in schools. It will also help you learn how to prepare videotape productions and incorporate them in both classroom and laboratory teaching.

ABOUT THIS MODULE

Objectives

Terminal Objective: In an actual school situation, present information with videotaped and/or televised materials. Your performance will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 35–36 (*Learning Experience III*).

Enabling Objectives:

1. After completing the required reading, set up and operate videotape equipment (*Learning Experience I*).
2. After completing the required reading, present information with a videotaped and/or televised program in a practice situation (*Learning Experience II*).

Prerequisites

To complete this module, you must have competency in developing a lesson plan and selecting student instructional materials. If you do not already have this competency, meet with your resource person to determine what method you will use to gain these skills. One option is to complete the information and practice activities in the following modules:

- *Develop a Lesson Plan*, Module B–4
- *Select Student Instructional Materials*, Module B–5

Resources

A list of the outside resources which supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references in your occupational specialty, and (3) to get assistance in setting up activities with peers or observations of skilled teachers, if necessary. Your resource person may also be contacted if you have any difficulty with directions, or in assessing your progress at any time.

Learning Experience I

Required

Videotape equipment (monitor, camera, recorder) to set up and operate.

A blank roll of videotape for use in setting up and operating the videotape equipment.

Optional

Videotape equipment (monitor, recorder) for viewing a videotaped demonstration.

The videotape, "Operating Videotape Equipment," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.

An audiovisual expert with whom you can discuss the uses and operation of videotape equipment.

An audiovisual equipment dealer whom you can visit or write to concerning videotape equipment and materials currently available.

Learning Experience II

Required

Videotape equipment (monitor, recorder) to use during a lesson.

A television set for viewing a closed-circuit or educational T.V. program.

Videotape equipment (monitor, camera, recorder) to record your own videotaped program (required only if you elect to prepare your own videotaped presentation).

A videotaped program with which to present information in a lesson.

A resource person to role-play a student to whom you are presenting a lesson and to evaluate your performance in using videotapes to present information.

Optional

A resource person to review the adequacy of your lesson plan.

Videotape equipment (monitor, recorder) for viewing a videotaped demonstration.

The videotape, "Present Information with T.V.," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.

A teacher skilled in presenting information with televised and/or videotaped materials whom you can observe.

Learning Experience III

Required

An actual school situation in which you can present information with videotaped and/or televised materials.

A resource person to assess your competency in presenting information with videotaped and/or televised materials.

This module covers performance element numbers 129, 132 from Calvin J. Cotrell *et al.*, *Model Curricula for Vocational and Technical Education: Report No. V* (Columbus, OH: The Center for Vocational Education, The Ohio State University). The 384 elements in this document form the research base for all The Center's PBTE module development.

For information about the general organization of each module, general procedures for their use, and terminology which is common to all 100 modules, see About Using The Center's PBTE Modules on the inside back cover.

Learning Experience !

OVERVIEW

After completing the required reading, set up and operate videotape equipment.

You will be reading the information sheet, Operating Videotape Equipment, pp. 6–16.

You may wish to view the videotape, "Operating Videotape Equipment."

You will be setting up and operating a videotape unit by completing the exercises specified in the Videotape Recorder Worksheet, pp. 17–20.

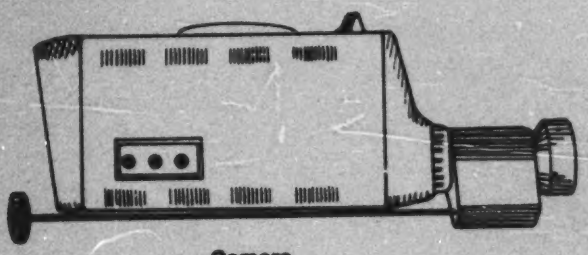
You will be evaluating your competency in setting up and operating the videotape recorder, using the Videotape Recorder Operation Checklist, pp. 21–22.

You may wish to locate and meet with a person with expertise in the area of audiovisuals for the purpose of discussing further the uses and operation of videotape equipment.

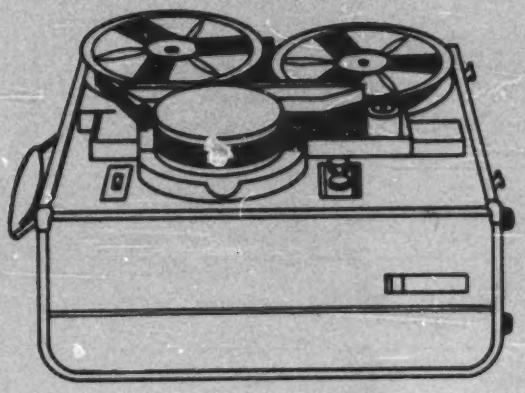
You may wish either to visit an audiovisual equipment dealer or to write to a dealer for catalogues describing the latest types of videotape equipment and supplies available.

FIGURE 1

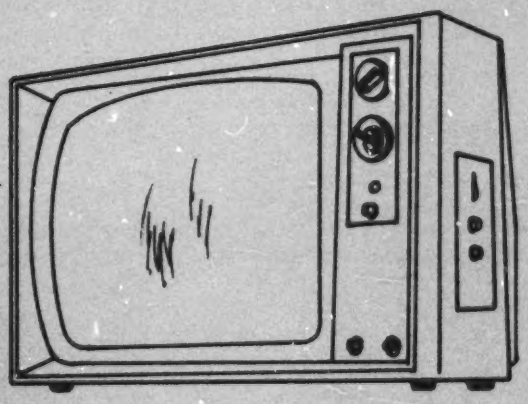
VIDEOTAPE EQUIPMENT



Camera



Recorder



Monitor

For information explaining how to select, set up, and operate the equipment and materials necessary for a presentation which uses a videotape recorder, read the following information sheet:

OPERATING VIDEOTAPE EQUIPMENT

Principles of Operation

A complete videotape unit, as shown in Figure 1, consists of a camera, a recorder, and a monitor. The videotape recording units generally used in the classroom operate much like a home television receiver in that the videotape monitor, which is a converted television set, relays the picture and sound just as a home television does. However, instead of the picture and sound being received from a T.V. station, it is received from a videotape recording which is played on a videotape recorder. The picture and sound are transmitted to the monitor through a cable connecting the monitor to the recording unit.

The videotape recorder operates on the same audio (sound) principles as an audiotape recorder. In addition, the videotape recorder is able to make a recording on tape of the visual images that accompanied the sound. As the picture is shown on the screen of the monitor, the sound is amplified by the sound system in the monitor.

The recorder uses recording tape that is stored in an open reel (reel-to-reel type) or in a self-threading plastic box (cassette type), depending on the make of the equipment. Today, most classroom videotape recorders use recording tape that is one-half inch wide in either half-hour or one hour lengths. Usually schools have black and white video equipment; however, color units are now becoming more generally available.

Operation Procedures

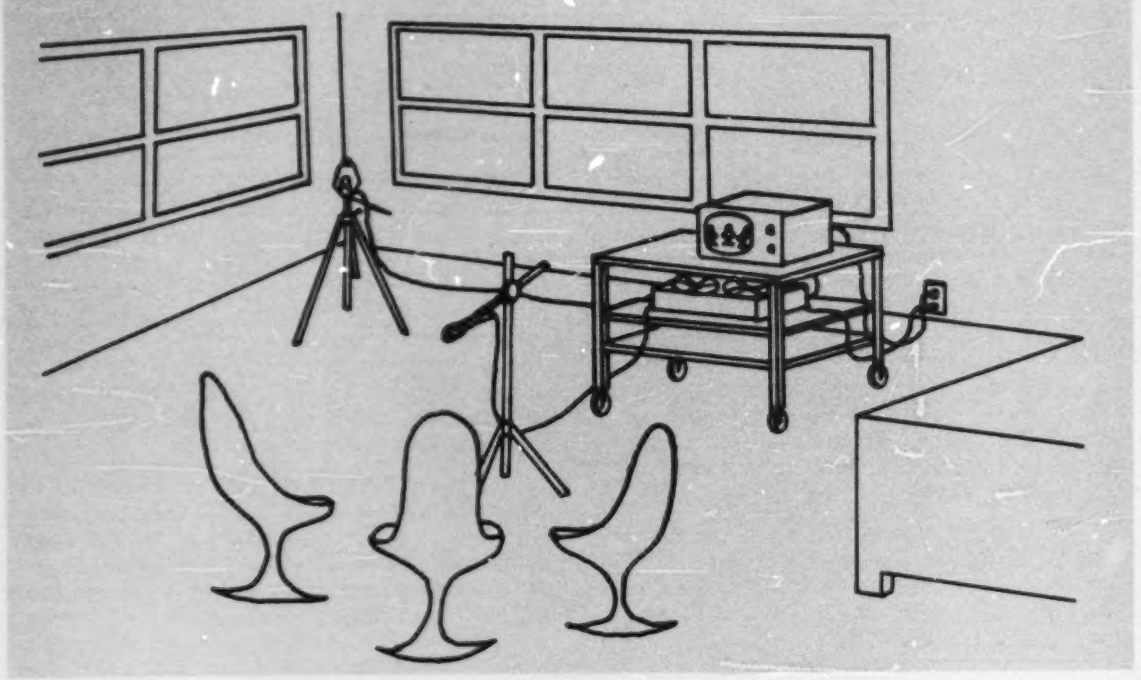
Placement of equipment.—The most complicated part of videotape use is producing a tape. Tape production requires five essential pieces of equipment: camera, tripod, microphone, monitor, and recorder or recording deck. These pieces of equipment need to be placed at the back of the room in which the scene or program is to be taped. This placement allows the camera operator to film long shots and close-ups, and to pan (i.e., follow the action by swiveling the camera on the tripod from one side to another).

It is important to station the equipment so that when you are taping, the camera does not face any windows. If you move the lens of the camera toward bright outdoor light, it causes the picture to fade or appear washed out due to the excessive light. Filming under such conditions requires a sun filter. In many situations, especially those for which long shots are required, it is advisable to place the camera in a corner of the room **beside** any windows to give you a wide angle which enables you to pan the front of the room. This also keeps the camera lens facing **away** from outdoor light.

A carelessly placed videotape unit can be a potential safety hazard because of the many electrical cords connecting the various unit pieces. Therefore, as a safety precaution, you should take care when placing the equipment and plugging it in so that people will not trip over the electrical cords.

FIGURE 2

PLACEMENT OF EQUIPMENT

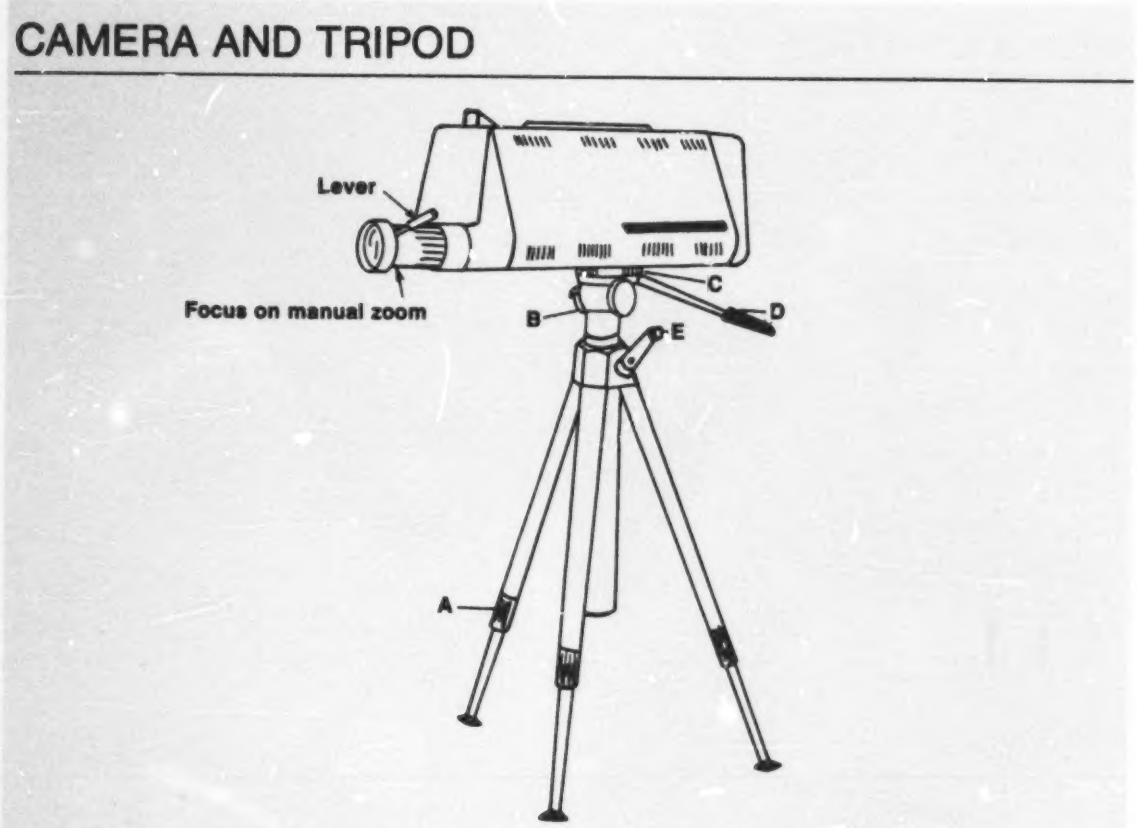


As is illustrated in Figure 2, you will want to have the recorder and the monitor (if your camera does not have a built-in monitor) close by the camera so that the operator can be in control of all units. While a cart with shelves, such as the one pictured, is not essential, it greatly simplifies the production and use of videotapes. The monitor can be set on the top shelf which is usually about 54 inches high, and the recorder can be set on the middle shelf which is usually about 28½ inches high. The bottom shelf can then be used for miscellaneous purposes such as providing space for electrical cords, extra equipment, blank tapes, etc.

Setting up equipment.—One of the first tasks is to set up the tripod. Most tripods have telescoping legs which can be extended by loosening the coupling toward the end of the leg. The tripod and its parts are illustrated in Figure 3.

FIGURE 3

CAMERA AND TRIPOD



To set up the **tripod,** loosen the **coupling** (Part A) on each leg, extend each leg, and tighten the coupling securely. Spread all three legs completely and tighten the **screw** or **knob** (Part B) located just below the **mounting plate** (Part C). Located on this mounting plate is a **lever-type handle** (Part D) which is used for tilting the camera up and down. To check to see if the legs are firmly in place, apply your weight moderately to the apex where the legs join.

To prepare the tripod for the camera, loosen the lever-type handle near the top of the tripod (Part D) and set the mounting plate on which the camera is to be secured (Part C) so that it is parallel with the floor. Then tighten the handle. Also, be sure the knob on the side of the tripod which controls lateral movement (Part B) is tight.

Next, raise the platform on which the camera will be mounted (Part C) to a height which will place the camera at your eye level. This is done by turning the **lever** or **crank** located on the side of the piece of metal which joins the three legs (Part E). This lever raises and lowers the extendable center shaft on which the camera is to be mounted.

Carefully align the threaded hole in the bottom of the camera's tripod mount with the screw in the tripod's mounting plate (Part C). Holding the camera in your left hand, carefully thread the screw of the tripod into the hole in the bottom of the camera. It should tighten smoothly and easily. Do not force it. Tighten the screw carefully and test the connection by lifting and moving the camera before removing your hand from it.

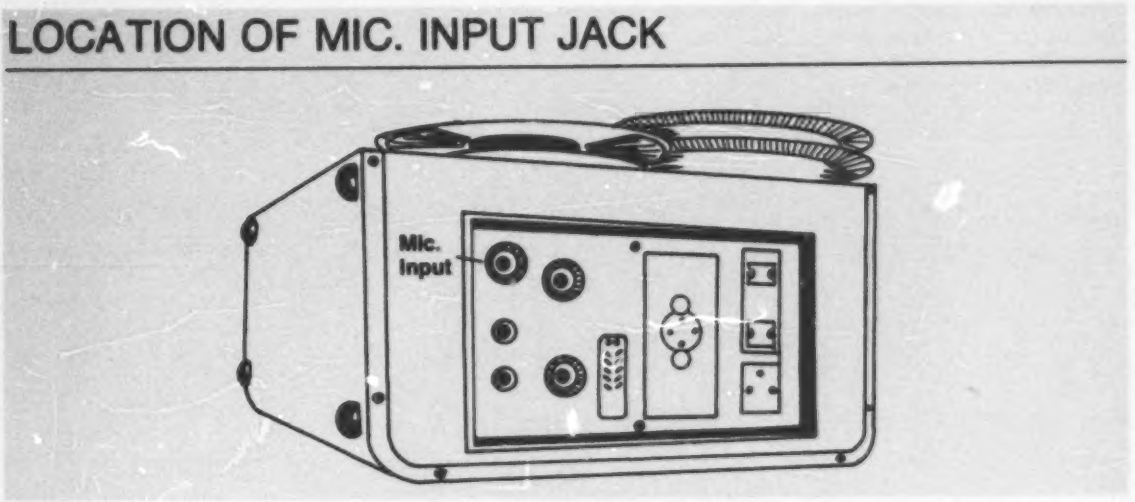
At this point, connect the power cord from the camera to an electrical outlet (110 volts). Remove the lens cover and turn the camera switch at the back of the camera to the **on** position.

Remove the cover from the recorder and connect the recorder to an electrical outlet. Turn the recorder on. Connect the monitor to a source of power, and turn it on as you would turn on a T.V. set. Then place the microphone within three to five feet of where the sound for the production will originate. Keep in mind that there are various types of microphones, and microphone placement will depend, in part, on the type of microphone you are using.

Some microphones are built into the camera and will move as it moves. Some are undirectional (will pick up sound from only one direction) or bidirectional (will pick up sound from front and back, e.g., speaker and audience). These need to be placed so they point at the sound sources. Other microphones are omnidirectional, and will pick up sounds from all directions, making exact placement less critical. The microphone must then be connected to the microphone jack, or receptacle, on the back of the tape recorder. (See the jack marked **MIC** in Figure 4).

FIGURE 4

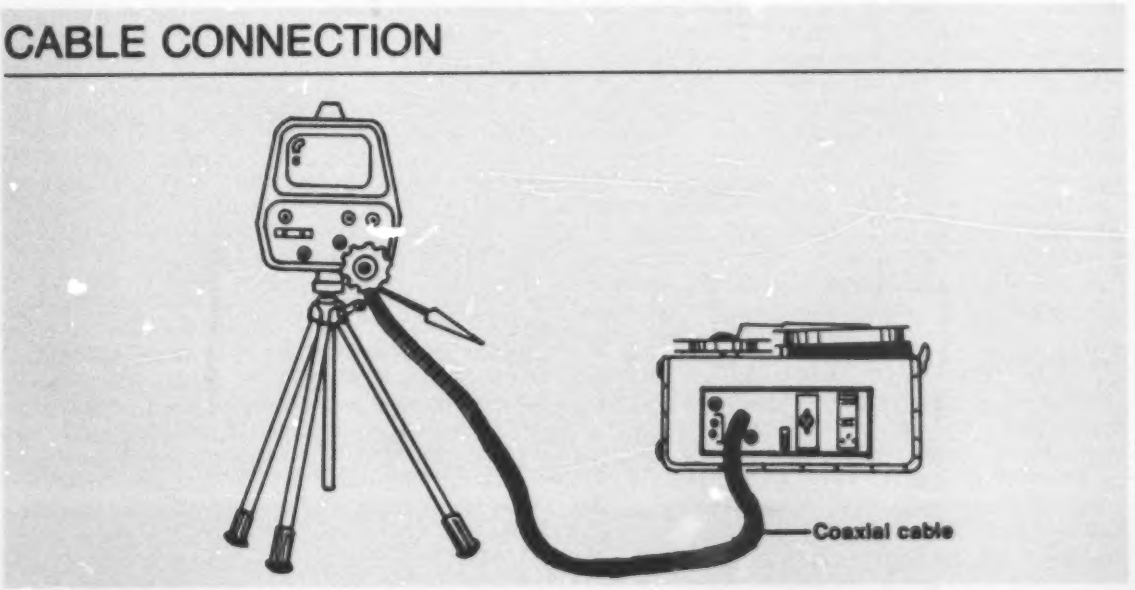
LOCATION OF MIC. INPUT JACK



There then needs to be a connection between the camera and the recorder. This is made using a coaxial cable (a thick, round cord, usually with threaded couplings at each end). This cable goes from either the underside or back of the camera (depending on the model) to the point marked **T.V. Input** on the back or side of the recorder as shown in Figure 5.

FIGURE 5

CABLE CONNECTION

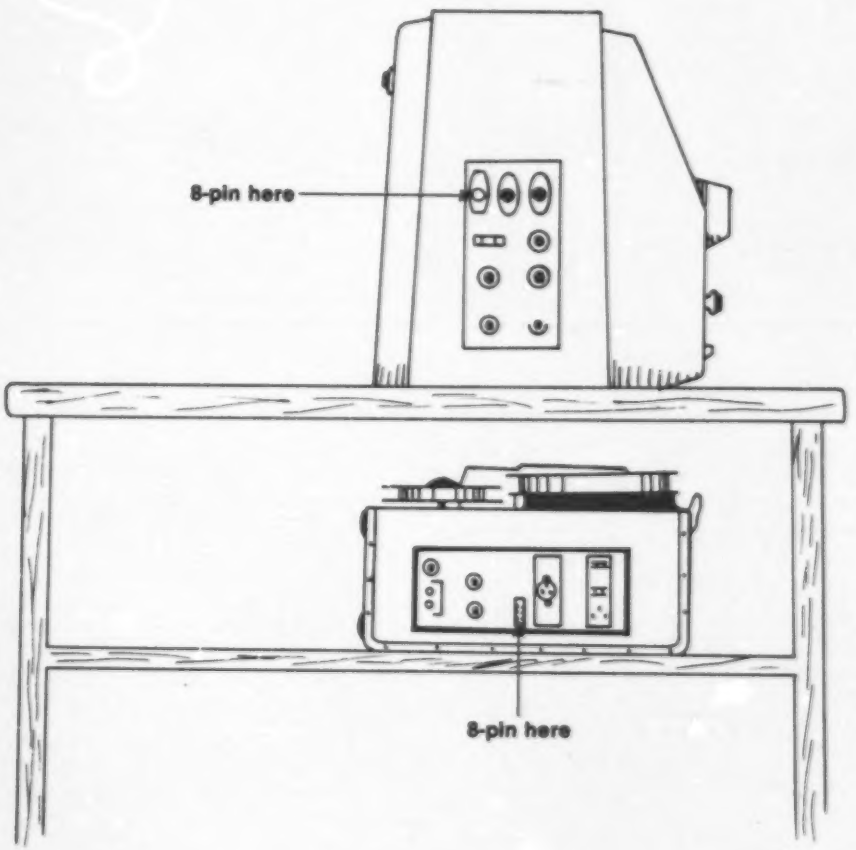


The operating manual for your equipment should be studied to determine the exact place of connection. Most recorders have two coaxial cable jacks. One is usually labeled **camera** and the other **video out.** When connecting the camera and recorder, the coaxial cable is connected with the camera jack. The video out jack is used for dubbing (i.e., recording through cables from a monitor to a recorder without using the camera, or from one videotape to another without the use of a camera).

Only one other basic connection is required: connecting the T.V. monitor to the recorder. This is done by using an eight-pin connector (ten-pin in some models). The eight-pin connector connects on the back of the tape recorder and back or side of the monitor as shown in Figure 6. **NOTE:** This connector is very fragile and should be connected carefully.

FIGURE 6

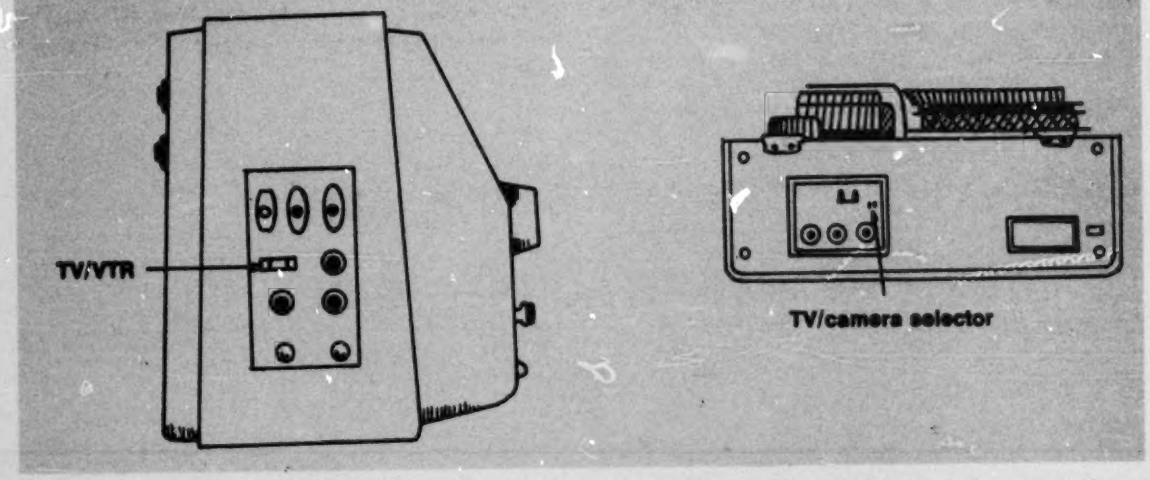
LOCATION OF EIGHT-PIN CONNECTORS



There are also some control switches located on the monitor and recorder which need to be in the proper positions for videotaping. These switches usually offer two options: T.V., or camera for the recorder; and T.V., or V.T.R. (videotape recorder) for the monitor.

FIGURE 7

POSITION OF SWITCHES FOR RECORDING



As shown in Figure 7, the recorder should be positioned on **camera** and the monitor switch should be positioned on **V.T.R.** when recording.

The following summary of steps to be followed in preparation for producing a videotape should be reviewed before recording begins.

1. Place the equipment at rear of room and in a position which faces away from the windows.
2. Set up tripod.
3. Connect camera, recorder, and monitor to a source of electrical power.
4. Place microphone three to five feet from sound source and connect microphone jack on the back of the recorder.
5. Connect the coaxial cable to the appropriate jacks in the camera and recorder.
6. Connect the eight-pin connector to both the recorder and the monitor.
7. Place switches in the correct positions for tape recording.

At this point, you are ready to thread the videotape onto the recording unit. If you are using a cassette recorder, you need only insert the plastic case in which the videotape is enclosed into the appropriate receptacle in the recorder. Each reel-to-reel recorder has its own threading pattern which should be followed. (A threading diagram is usually printed on the recorder.)

A videotape recorder is quite easy to thread; in fact, a reel-to-reel videotape recorder is threaded much like an audiotape recorder. The only caution to be considered is that you handle the videotape carefully. Avoid handling the tape surface insofar as possible, and keep the tape surface smooth, not wrinkled or folded.

The feed reel on a reel-to-reel recorder is on the left. The tape from the feed reel leaves the reel in a clockwise fashion and goes past a rubber roller, across a bright metal post with a flat surface, around the semi-circular head, across another metal head, around a feed roller, and counterclockwise onto the take-up reel. Check your threading by advancing the tape manually a short distance. This helps avoid a situation in which the tape, through improper threading, leaves the reel and is damaged.

Trial taping.—Before any actual taping is attempted, it is always wise to make a trial taping to be certain that you are getting good audio and video quality. It is also advisable to reset the footage counter (i.e., a small square window on the recorder displaying numerals) to zero by depressing the reset button. This allows you to keep track of the point on the tape where you began or where certain scenes or presentations are located.

During this trial run, check to see if your lighting is adequate. Usually, no additional special lights are required, but **full** room lights should be used and illumination should be as even as possible. Window shades should be used to control direct sunlight, and spots of light or harsh shadows should be avoided.

Next, be sure all equipment has been fully activated. You can determine if your connections from camera to recorder and from recorder to monitor are correct by depressing the **record** button on the

recorder. When this is done, you should receive the picture you will be taping on your monitor. If you obtain a loud annoying noise from the monitor when the record button is depressed, you are getting feedback from the microphone. This can be eliminated by turning the volume control located on the monitor to the **off** position.

The recorder will usually have a single dial control or lever for controlling tape movement. To move the tape forward, use the **fast forward** position; to rewind, use the **rewind** position. Motion can be stopped by using the **still** position.

Focus and zoom controls vary with types of equipment. One type is illustrated in Figures 8 and 9.

FIGURE 8

CAMERA FOCUS CONTROLS: SIDE VIEW

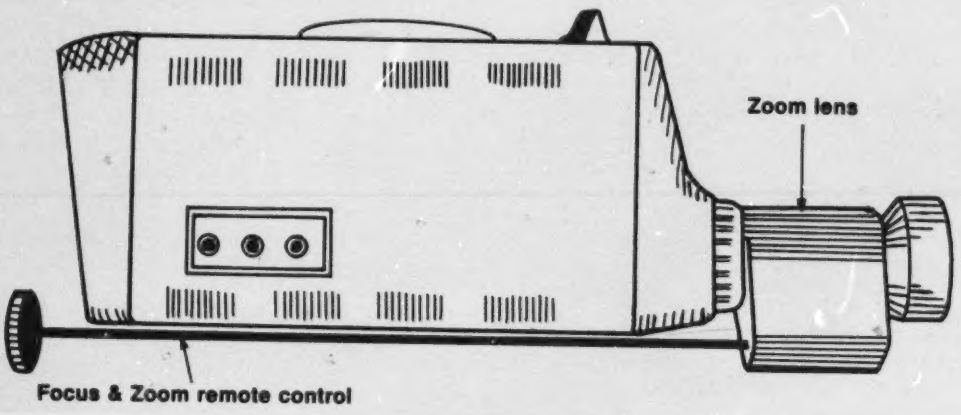
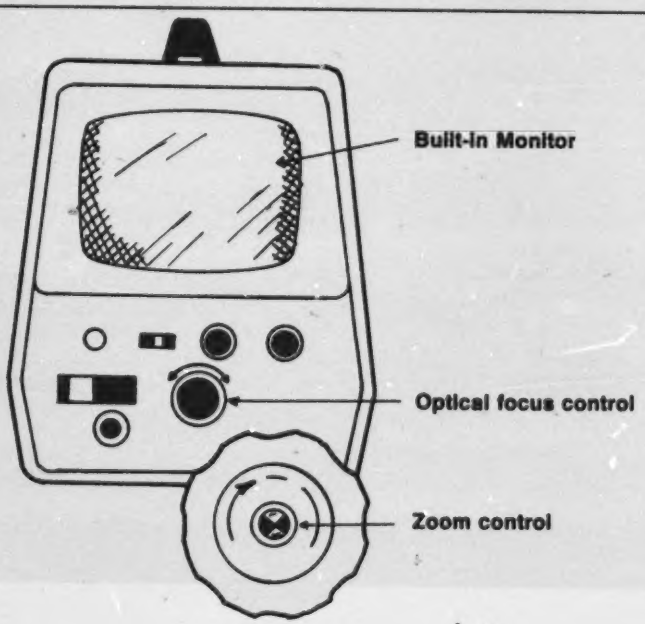


FIGURE 9

CAMERA FOCUS CONTROLS: FRONT VIEW



The picture on the monitor is focused by rotating the focus apparatus until you receive a sharp, clear picture on your monitor. You may also need to darken or brighten, or increase or decrease the contrast of your picture. This is done by moving those respective controls on your monitor or on the camera itself if there is a built-in monitor as illustrated in Figure 9. Likewise, you can provide more light by adjusting the lens opening.

Practice zooming (using a zoom control so that the camera seems to move toward or away from an object rapidly) for more detailed pictures. This is accomplished by either pulling or pushing the remote zoom and focus attachment which extends from the front of the camera, or by rotating the lever attached to the lens. Be sure to refocus as necessary while zooming. You can check the monitor as you zoom to be sure the picture stays clear, bright, and pleasing. Make sure that you **center** the person speaking or scene being shot and that you don't show a lot of ceiling, floor, or empty space.

When you need to tilt the camera up and down to follow the action, you should loosen the lever-type handle (see Figure 3) just enough to allow you to slowly tilt the camera. Never remove your hand from this handle or the tripod unless you have tightened it securely. If the camera tilts on its own, the weight of it can tip the tripod over, causing damage to the camera.

Likewise, as the person or object being taped moves about, you will need to move the camera in a sideways fashion. To do this, you need to loosen the knob on the side of the camera. Then move the camera laterally (pan) slowly and smoothly. You will need to practice doing this so that you can change the position of the camera without jerking it. This will be simpler if you do not loosen the knob any more than necessary.

Record a brief scene which involves both audio and visual portions. Then, replace the lens cap, rewind the tape ("rewind" position), and play the scene back ("play" position). It is very important that the lens cap be placed over the lens as soon as the filming has been completed. If it is not, it is likely that an image of the object which the camera is facing will be burned into the camera tube and, thus, the tube will have to be replaced.

During the playback, if you do not get sound, check to see if the microphone is connected correctly and the volume control on the monitor is in the "on" position during replay.

If all switches are positioned correctly, all cables are properly connected, and the recorder is threaded properly, but you receive no videotape image during the playback of your "trial run," chances are the recording heads need to be cleaned. This is the most frequent maintenance problem with videotape recording equipment. The recording heads, as shown in Figure 10, are not difficult to clean, but they are very delicate and should be handled gently.

FIGURE 10

LOCATION OF RECORDING HEADS

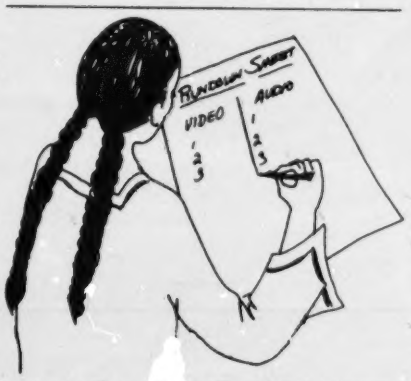
The recording heads can usually be cleaned by touching them with special cleaning fluid on a cotton swab or other applicator. You should **not** rub the heads in any direction due to their fragility. The posts should also be cleaned, but be sure to keep the fluid from touching any rubber parts because the fluid will deteriorate rubber.

After checking the above possibilities, if the equipment is still not recording both picture and sound, then you should refer to the operator's manual or get the assistance of a technician.

Recording the presentation.—Given that you are recording picture and sound, you are now ready to record your production. You will probably be either recording events as they occur naturally or staging a production. Natural events such as student presentations, routine class proceedings, or lessons can be taped for later viewing or evaluation purposes. A staged production involves planning in advance for a presentation especially designed to be taped for later use. For instance, you might stage a special demonstration covering a special hard-to-observe procedure such as the artificial insemination of dairy cattle or grinding a valve for an automobile engine.

Staged productions should be rehearsed in advance in order to obtain a smoother production. In some cases, you may be able to plan the production by talking it over with the other people involved. For example, you might tell an artificial insemination technician the steps you want to illustrate via tape, and how much explanation you want.

However, if the production is more critical or if you want to produce a more professional tape, you may want to develop a "rundown sheet" in advance. A rundown sheet contains general explanations of what will be taped, both audio and video portions, and in what order these will be taped. Such sheets usually consist of two columns as shown in Sample 1. The left column provides video directions, while the right column lists the basic instructional points which will be presented orally with the video portion, or presents a more detailed scripting.



SAMPLE 1

T.V. RUNDOWN SHEET

Date:
Title:

Name:

VIDEO	AUDIO
Title	Intoductory remarks
Teacher at board drawing figure	Explain first three steps involved in figure
CU (close up) of model	Discussion of process

Once the presentation has been prepared and is ready to begin, all that remains to be done is for you to record, on tape, the pictures and sound which you wish to use with future audiences. This requires focusing and framing the picture, and making sure the camera follows the pertinent action of the presentation. Smooth camera operation is accomplished only through practice.

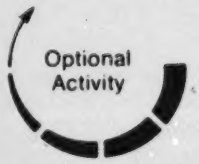
If the camera has a built-in monitor, you can observe on this monitor the picture just as it is being recorded. When the camera does not have a built-in monitor, you must view the T.V. monitor as you record to check the picture.

When you have completed a recording task, you should dismantle the equipment using the following procedure.

1. Turn camera off.
2. Replace lens cover.
3. Turn recorder off.
4. Turn monitor off.
5. Disconnect power cords and store.
6. Remove tape reels from recorder.
7. Replace cover on recorder.
8. Disconnect microphone and store.
9. Disconnect coaxial cable.
10. Disconnect eight-pin connector if you are not leaving the monitor and recorder on a portable cart.
11. Remove camera from tripod.
12. Lower the center shaft on the tripod.
13. Collapse telescoping tripod legs.
14. Store all equipment.

Showing a videotape.—When you are ready to show a tape you have produced or a tape produced locally or commercially, you set up the recorder and monitor just as for taping except without the camera connections. The monitor is then operated just as a home T.V. is. The unit must be turned on, volume adjusted, picture brightened or darkened, contrast set, and vertical and horizontal adjustments made as indicated.

After showing the tape, steps 3,4,5,8 and 12 above should be completed again.



The videotape, "Operating Videotape Equipment," shows a person actually setting up and operating videotape equipment. Camera operation and special effects are illustrated and explained. You may wish to view this videotape before attempting to operate this equipment yourself.

The following worksheet is designed to help you become competent in operating videotape equipment. No one need see this worksheet unless you choose to show it to them, so do not be reluctant to record what actually happens, right or wrong. The sheet is not intended to show proof that you did everything perfectly the first time. It is intended to help you to organize your knowledge about the operation of videotape equipment, to help you apply that knowledge to actual equipment, to point out to you where you have gaps in your knowledge, and to help you determine how to fill those gaps. Completed thoughtfully and thoroughly, this sheet should make a useful reference for you in the future. Read the directions carefully and then complete each of the 19 exercises.

VIDEOTAPE RECORDER WORKSHEET

Directions: Locate a videotape recorder, camera, monitor, blank tape, and operator's manual. Arrange for the equipment to be placed in the room in which you will be working. Complete each of the following exercises using the actual equipment and materials. Each exercise requires a short response. Please respond fully, but briefly, and make sure you respond to all parts of each item. Do **not** answer simply YES or NO; explain your responses. Should you have any difficulty with an exercise, make a note of that problem.

1. What is the make and model of the video equipment (camera, recorder, and monitor) with which you are working?

2. Is there an operating manual? Does it contain any information that is different from or was not covered in the information sheet? If so, briefly describe that information.

3. What type of cart is being used to hold the projector (portability, number of shelves, height, etc.)?

4. Describe the videotape you are using (width, length in minutes, etc.).

5. Describe the monitor you will be viewing (size, controls, portability).

6. Position the equipment in the room. List the steps you followed **and** draw a diagram of how you positioned the equipment.

7. What electrical connections need to be made?

8. How much microphone cord is available and where is the microphone connected to the recorder?

9. How do you connect the camera to the recorder?

10. How do you connect the recorder to the monitor?

11. Locate on/off control on the camera. How can you tell when the camera is on?

12. Locate on/off control on the recorder. How do you know when the recorder is ready to operate?

13. Thread the recorder. Describe briefly, or diagram the threading procedure.

14. Reset counter to zero. How high does the counter count?

15. Film a short segment of videotape to check out the system. Describe the procedure you followed to accomplish this.

16. Focus (take a long shot and short shot if you have zoom lens). Describe the procedure followed.

17. Did you receive a clear picture and good sound? If not, what did you have to do to correct the situation?

18. Replay your recording and adjust the monitor until you have the brightness, contrast, and volume described. Describe the procedure followed.

19. Under the supervision of your resource person, clean the recording heads. What materials were used? Describe the procedure followed.

After you have completed each of the activities in the Videotape Recorder Worksheet, use the Videotape Recorder Operation Checklist, pp. 21–22, to evaluate your work.

VIDEOTAPE RECORDER OPERATION CHECKLIST

Name _____

Date _____

Resource Person _____

Directions: Place an X in the YES or NO box to indicate whether each item was performed successfully or not.

	Yes	No
When you were setting up the equipment, you completed each of the following steps:		
1. fastened telescopic tripod legs securely	☐	☐
2. securely attached the camera to the tripod mounting plate	☐	☐
3. connected the power cords	☐	☐
4. positioned electrical cords so they would not be tripped over	☐	☐
5. connected the microphone	☐	☐
6. connected the coaxial cables	☐	☐
7. connected the eight-pin connector	☐	☐
When you were threading the videotape on the recorder, you made sure that you:		
8. followed the threading diagram	☐	☐
9. cleaned the recording heads if necessary	☐	☐
10. reset the counter	☐	☐
When you recorded the trial segment, you:		
11. removed lens cover	☐	☐
12. activated all power switches	☐	☐
13. set the lens opening	☐	☐
14. focused properly	☐	☐
15. panned slowly	☐	☐
16. took far shots and close-ups (if you had zoom lens)	☐	☐
When you replayed your tape, you:		
17. adjusted volume on monitor	☐	☐
18. adjusted brightness and contrast on monitor	☐	☐
19. controlled any vertical or horizontal malfunctioning	☐	☐

LEVEL OF PERFORMANCE: All items should receive YES responses. If any item receives a NO response, correct that condition using the actual equipment and materials. If you have trouble correcting the condition, check with your resource person or someone with expertise in the area of audiovisuals.

You may wish to contact your resource person, or someone else you or your resource person may know of with expertise in the area of audiovisuals. This person could discuss with you special techniques or helpful hints that can be of use to you when you work with videotape equipment.

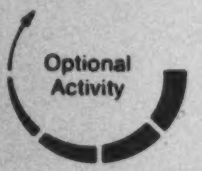
You may wish to check into the latest advancements in videotape equipment. You may also wish to identify materials that are currently available. If there is an audiovisual equipment dealership in your vicinity, you may wish to visit it and look over the equipment, or to make arrangements to have one of their salespersons talk to you. If you cannot make such a visit, you could write to one or more of the major manufacturers of videotape equipment and materials, asking for catalogues.

Learning Experience II

OVERVIEW

After completing the required reading, present information with a videotaped and/or televised program in a practice situation.

You will be reading the information sheet, Using the Videotape Recorder and Educational Television as Instructional Devices, pp. 25–28.



You may wish to view the videotape, "Present Information with T.V."

You will be selecting an objective in your occupational specialty that lends itself to a videotaped and/or televised presentation.

You will be selecting, modifying, or developing a lesson plan designed to achieve that objective using a videotape recording and/or educational T.V. program to illustrate the lesson.

You may wish to have your resource person review the adequacy of your plan.

You will be preparing or obtaining (and previewing) the necessary videotaped presentation, and making arrangements to secure the necessary equipment for presenting the videotape. Or, you will be selecting an appropriate televised program and making arrangements to secure the necessary equipment for viewing.

You may wish to arrange through your resource person to visit a classroom in which a teacher experienced in the use of videotaped or televised materials is presenting information using videotaped or televised presentations.

You will be presenting your lesson to your resource person.

You may wish to present two lessons, one using a videotaped presentation and one using an educational T.V. program.

Your competency in presenting information with a videotaped and/or educational television program will be evaluated by your resource person, using the Presentation Checklist: Televised and Videotaped Materials, pp. 31–32.

For information describing the general and specific uses of videotaped and televised materials in presenting information, and explaining the procedures for their classroom use, read the following information sheet:

USING THE VIDEOTAPE RECORDER AND EDUCATIONAL TELEVISION AS INSTRUCTIONAL DEVICES

Videotaped or televised information can add a new dimension to your teaching. By prudently selecting such material and infusing it into the curriculum, you can enhance your instructional effectiveness. The discussion which follows describes the instructional uses of (1) previously taped videotape productions, (2) videotaping in the classroom or laboratory during instruction, and classroom procedures for videotape use, and (3) centrally transmitted educational television programs.

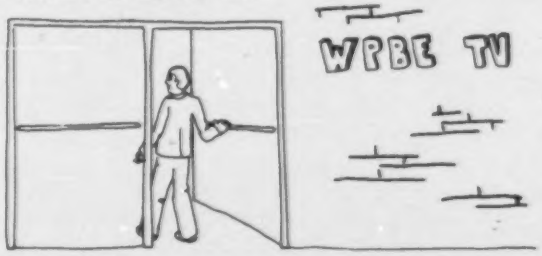
Previously Taped Productions

In planning activities which you will use to help students achieve lesson objectives, you need to consider if prerecording a videotape (or using a videotape prepared by a colleague, an audiovisual specialist, or a commercial firm) could help meet those needs. For example, if your lesson requires a demonstration which involves detailed operations or the presentation of objects too small to be easily viewed, a videotape of those portions of the lesson can be prepared in advance. If the camera is zoomed in on the action or object, the resulting close-ups on the videotape will allow all students to have an unobstructed and clear view. A demonstration of carburetor adjustment or a delicate threading operation, or the exposition of the cambium layer in a lesson on grafting shrubs can all be presented more readily by videotape than by conventional means.

Another benefit of videotape is that it allows students to "see" guest speakers and "go" on field trips which they would otherwise miss. A guest speaker's one-time presentation can be taped for presentation to future classes, or a person who cannot make a personal appearance at the school can be videotaped elsewhere and the tape shown in place of his or her actual appearance. When a field trip would be ideal for reaching lesson objectives, but is impossible due to time or distance constraints, the field trip might be taped in advance and the class can then "take" the field trip within the classroom at the time needed.

Similarly, if a commercial or educational television station is going to broadcast a program which you would like your students to view, but the broadcasting time is inappropriate for your class, the program can be videotaped directly from the monitor for later viewing. To record directly, you use the same hookups between monitor and recorder. Move the **T.V./Camera Selector switch** on the recorder to T.V., and the **T.V./V.T.R. switch** on the monitor to V.T.R. Then turn the monitor channel selector to the desired station, check the picture and sound quality, and record.

The recording of a broadcast program is, in the strictest sense, illegal in the same sense that duplicating a page from a copyrighted book is illegal. However, most networks seem unconcerned as long as the taping is done on a limited basis for a limited classroom audience. You would be wise to check local policies, of both the school district and the television stations involved, before undertaking such taping. Many T.V. programs produced by the National Education Television network are available as 16 mm films or videotape from NET Film Service, Audio-Visual Center, Indiana University in Bloomington. Some programs broadcast by commercial stations are available through commercial film distributors.



Pretaped presentations such as those mentioned previously share a number of advantages. A videotape can be rewound during a classroom presentation and segments can be reshown. This allows students to have additional opportunities to grasp information and techniques that they may have missed during the original showing. Likewise, videotape progress can be stopped during presentation so students can view a still action shot for an extended period of time. This allows students to study a single frame of a complex operation in detail or allows the teacher to point out selected features. Additionally, the videotaped presentation can be made available for use by individual students who wish or need to review the material or who were absent during the presentation.

In competency-based (or performance-based) vocational programs, videotapes have a very special and critical function. Because students progress at their own rates in such programs, the students will need to have instruction available to them at any time. Teacher-prepared videotapes of demonstrations of manipulative skills or of other lessons can be produced to correlate with written instructional modules. As a student is ready to learn the skill or complete the module, he/she can locate the videotape in the resource center and can view it as necessary to complete the module and acquire the skill. The instructor, thus, does not need to repeatedly give the lesson to individual students, but is free to work with them in more productive ways.

Finally, the use of videotaped presentations can save time. You can carefully plan, prepare, and present a quality demonstration, role-playing activity, or other teaching presentation once and use it for several classes or over several years' time. This also ensures that the quality of your presentation will always be the same.

There are some possible limitations to the use of pretaped videotapes, but by being aware of these constraints, they can easily be avoided or minimized. If you are going to use a commercially made videotape or one developed locally, you need to check to be sure that the videotape is compatible with your equipment. Before 1972, a videotape recorded on one brand of recorder often could not be played on another make of recorder. All videotapes of the same width which have been taped on equipment manufactured since 1972 can be played on all other equipment manufactured since 1972.

The preparation of quality videotaped presentations involves time. However, the advantages of being able to show close-ups, to repeat segments of the presentation, to re-use the videotape in other classes, to share the videotape with colleagues, and to provide students with a means of reviewing material, far outweigh the initial time expended. In addition, in some schools, audiovisual specialists are available to assist you or, in some cases, to handle the taping for you.

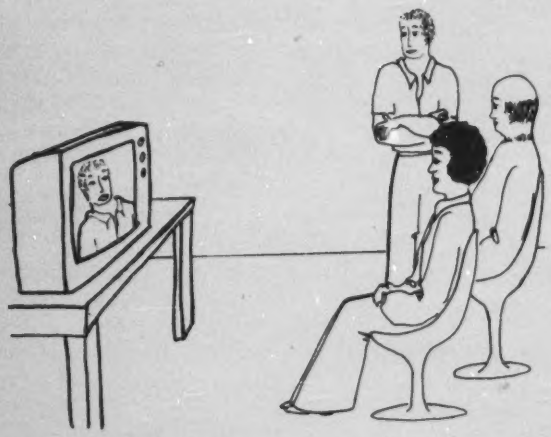
Even with an expert directing the taping, homemade videotape productions do not match the quality of production or programming which students are accustomed to viewing on their home T.V.'s. This does not have to be a disadvantage. If students are told how videotapes can be of use in helping them to meet lesson objectives, they can deal with the fact that the tapes are intended to be instructional tools and not professionally prepared nationally viewed television programs. As a matter of fact, students react very positively to seeing the familiar figure of their instructor on the screen, and are usually much more ready to accept the instruction given. Furthermore, the color videotape equipment now available allows a more T.V.-like presentation to be produced.

Videotaping during Instruction

There are at least three classroom situations in which videotaping can be extremely valuable. The first is not strictly videotaping since it involves only the camera and monitor. In the previous section of this information sheet, it was explained that videotaping close-ups of detailed operations in advance could be helpful. Similarly, by zooming the camera in on the operation, you can transmit the on-going presentation to the monitor without recording the sequence. As you proceed, students can see both the live demonstration and the transmitted close-ups of the operation.

Important lessons, such as the introductory lesson in a unit, can be videotaped in progress. Individual students can then review these as necessary or students who were absent can use these to catch up. (This also affords the teacher an opportunity to evaluate his or her own instructional effectiveness).

Student presentations can likewise be taped for the purpose of self-evaluation, further discussion, or teacher evaluation. When a presentation of superior quality is thus captured on videotape, it can be used as a model to be shown in class or viewed on an individual basis.



Educational Television

Centrally transmitted or closed-circuit television is available in some school districts. In such districts, individual schools or individual classrooms are equipped with monitors, and educational programming is broadcast, usually from a local district-owned station. T.V. teachers can present lessons otherwise unavailable. Guest speakers can make presentations. Educational films can be aired. The advantage is that each of these well-prepared presentations is thus made available to all teachers in the district. The disadvantages are that a given program may not be scheduled when it is appropriate to your lesson or at a time when you have a class. However, as mentioned previously, you may be able to videotape these for later use.

Some critics contend these stations offer little of value to the vocational student, but this is easily remedied, especially if the station is district-owned. Vocational educators in the district can recommend to the station operators particular presentations, speakers, or films they would like to broadcast. With a little planning, probing, and persuasion, educational television can be a very useful tool in the vocational classroom or laboratory.

Classroom Procedures

Preplanning and preparation skills, such as planning a lesson and a unit, and obtaining appropriate student instructional materials, are essential to the procedures you follow in using videotape recordings and educational T.V. programs in the classroom. In order for the videotape recorder or educational T.V. to be used effectively, its use must fit the needs of the lesson, and the programs should do all or at least most of the following:

- meet the lesson objectives
- fit students' needs, interests, and abilities.[1]
- provide concrete experiences
- motivate or arouse interest
- develop continuity of thought
- clarify meaning and new vocabulary
- provide variety in learning
- save instructional time
- provide experience not as easily obtained by some other instructional device
- be up to date
- be presented at a logical point in the lesson
- be clear, logical, concise, error free, and attractive

With the above criteria in mind, your first step is to produce a videotape, locate an existing videotape or scheduled closed-circuit T.V. program, or arrange for a closed-circuit program that fits into your unit of instruction. Your next step is to plan the lesson, including how the televised or videotaped presentation will be used. In presenting any type of mediated instruction, you first need to plan how you will prepare the class for the presentation.

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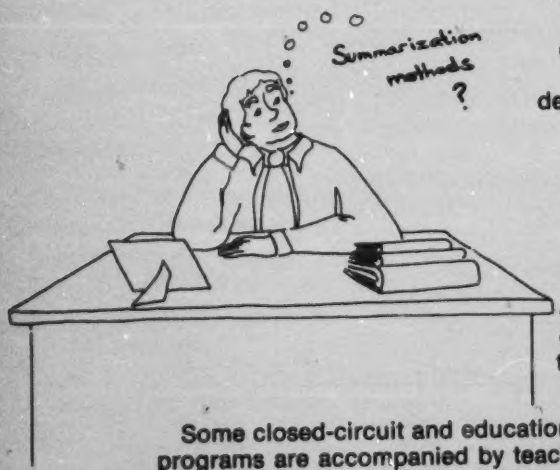
1. To gain skill in determining the needs and interest of students, you may wish to refer to Module B–1, *Determining Needs and Interests of Students.*

Preparing a mental set for the televised presentation is extremely important. That is, students should know what to expect from, and what they should look for in, the presentation. They need to know how the presentation will aid in meeting lesson objectives and what they will be expected to know or do as a result of viewing it. This can be handled by raising questions, pointing out key items to look for, discussing new vocabulary, passing out study guides, etc.

Your lesson plan also needs to indicate at what point in the lesson the presentation will be shown for maximum effectiveness. If you are showing a videotape, you need to determine if you will (1) show the entire tape without stopping, (2) stop for still shots to allow extra discussion, (3) rewind segments for extra viewing, or (4) use some combination of the previous three items. The way you handle this will depend on the content of the videotape, the abilities of your students, and the objectives of the lesson.

A summarization method needs to be decided on. Will you summarize or ask students to summarize? Would a panel discussion be an effective summarization device? Could study guides be used? How will you evaluate what students have learned from the presentation? Could exercises be designed which require students to put the televised or videotaped information to use? For example, you could have students view a videotaped demonstration and then practice the steps without your assistance. And finally, how will you get students' evaluation of the presentation itself?

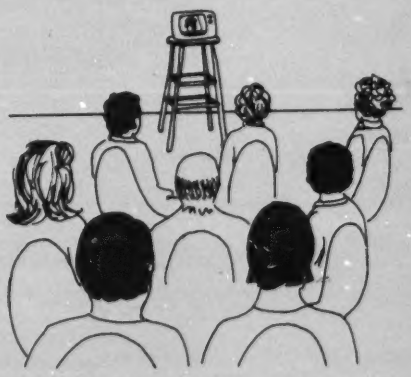


Some closed-circuit and educational television programs are accompanied by teachers' guides. Before you use such materials, either with a class or for individual study purposes, you need to make sure that they do, in fact, meet the needs of your lesson objectives and your students. The written materials prepared by the television station personnel, the T.V. teacher, or district personnel can be of help to you in preparing your own study guides or worksheets. These can be used to prepare students for the presentation, as a basis for class discussion, as a follow-up activity, or to direct individual viewing.

Once you have completed your planning, you then need to arrange in advance for all the necessary equipment to be available at the time you will need it. Plan to have the equipment available enough in advance that you can set it up and try it out to be sure that the equipment is in good working order and that you are receiving a clear picture and sound on the monitor.

You will also need to arrange your room for maximum viewing effectiveness. The television or monitor should be placed in front of the room. If the room has windows on one side, the set should be placed at the front on the window side to avoid glare. The set should ideally be mounted on the wall above the heads of the students and tilted slightly downward, again to avoid glare. The set can also be placed on a stand approximately five feet high. If it cannot be tilted to avoid glare, it can be fitted with a hood to reduce screen glare.

Students should be seated so each has an unobstructed view of the screen, and no student should be seated farther from the screen in feet than the size of the screen in inches. For example, if the T.V. screen is 24", no student should be farther away from the screen than 24 feet. Finally, for a group of 25–30 students, a 21- or 23-inch set should be used. If you are working with a set with a smaller screen, you will need to deal with very small groups of students or use more than one set.[2]



When you reach the point in your lesson in which the videotaped or televised presentation is to be shown, prepare the students and show the presentation according to your lesson plans. Unless the equipment is in the way, it is best to wait until after you have completed the lesson (discussion, evaluation, summarization, follow-up, etc.) to put the equipment away. In this way, the operation of the equipment does not interfere with the flow of the lesson.

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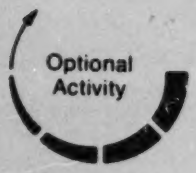
2. Adapted from Edgar Dale, *Audiovisual Methods in Teaching*, Third Edition (Hinsdale, IL: The Dryden Press, 1969), pp. 365–366.



Before attempting to plan for a televised or videotaped presentation yourself, you may wish to view the videotape, "Present Information with T.V.," for examples of teachers making such presentations.

Select a student performance objective in your occupational specialty which could be achieved, at least partially, by the use of a videotaped and/or televised presentation. (In a real world situation, you start with an objective and then select the most appropriate materials and/or teaching methods. In this practice situation, however, you need to select an objective which lends itself to using a videotaped and/or televised presentation.)

Prepare a detailed lesson plan which includes the use of a videotaped and/or televised presentation. In your plan, explain what type of presentation is needed, how it will be used, and when. Instead of developing a lesson plan, you may select a lesson plan that you have developed previously, and adapt that plan so that it includes the use of a videotaped and/or televised presentation.

You may wish to have your resource person review the adequacy of your plan. He/she could use the Teacher Performance Assessment Form in Module B–4, *Develop a Lesson Plan*, as a guide.

Based on your lesson plan, locate an existing videotaped presentation, prepare your own videotape, or locate or arrange for a closed-circuit televised presentation. Also, arrange to have the necessary equipment available when you make your presentation. Having previewed the presentation (if possible), finalize your plans.

Before presenting your lesson, you may wish to arrange through your resource person to observe a lesson involving the use of a videotaped or televised presentation which is being presented by a vocational teacher in your service area who is experienced in using such materials.

In a simulated classroom situation, present your lesson to your resource person. Your resource person will serve two functions: (1) he/she will role-play a student to whom you are presenting the lesson, and (2) he/she will evaluate your performance.

You may wish to present two separate lessons. In one lesson, you could present information using videotaped material, perhaps a videotape you have made yourself. In the other lesson, you could present information using an educational or closed-circuit T.V. program.

Give your resource person the Presentation Checklist: Televised and Videotaped Materials, pp. 31–32, before making your presentation in order to ensure that he/she knows what to look for in your lesson.

PRESENTATION CHECKLIST: TELEVISED AND VIDEOTAPED MATERIALS

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Name _____

Date _____

Resource Person _____

LEVEL OF PERFORMANCE

Televised Materials	N/A	No	Partial	Full
The teacher:				
1. arranged the physical setting in advance in a way that would ensure that all students could both see and hear the presentation clearly	☐	☐	☐	☐
2. had equipment and materials assembled in advance	☐	☐	☐	☐
3. set up equipment according to manufacturer's recommendations	☐	☐	☐	☐
4. prechecked and prefocused the equipment	☐	☐	☐	☐
5. used programs which met the following criteria:				
a. aided in meeting the objective(s) of the lesson	☐	☐	☐	☐
b. content was interesting and motivating	☐	☐	☐	☐
c. content was at students' comprehension level	☐	☐	☐	☐
d. content fit the needs and interests of students	☐	☐	☐	☐
e. content was accurate and up to date	☐	☐	☐	☐
f. technical quality of the program was good	☐	☐	☐	☐
6. prepared students adequately for the program (e.g., raised key questions, defined terms, etc.)	☐	☐	☐	☐
7. presented the program at a logical point in the lesson	☐	☐	☐	☐
8. summarized (or had class members summarize) the content of the program	☐	☐	☐	☐
10. obtained student feedback on their evaluation of the program	☐	☐	☐	☐

Videotaped Materials

The teacher:	N/A	No	Partial	Full
11. arranged the physical setting in advance in a way that would ensure that all students could both see and hear the presentation clearly	☐	☐	☐	☐
12. had equipment and materials assembled in advance	☐	☐	☐	☐
13. set up equipment and threaded the recorder according to manufacturer's recommendations	☐	☐	☐	☐
14. prechecked and profocused the equipment	☐	☐	☐	☐
15. used programs which met the following criteria:				
a. aided in meeting the objective(s) of the lesson	☐	☐	☐	☐
b. content was interesting and motivating	☐	☐	☐	☐
c. content was at students' comprehension level	☐	☐	☐	☐
d. content fit the needs and interests of students	☐	☐	☐	☐
e. content was accurate and up to date	☐	☐	☐	☐
f. technical quality of the program was good	☐	☐	☐	☐
16. prepared students adequately for the program (e.g., raised key questions, defined terms, etc.)	☐	☐	☐	☐
17. presented the program at a logical point in the lesson	☐	☐	☐	☐
18. paced the presentation according to the needs of the lesson and of the students (e.g., used "rewind" or "still" controls if necessary and appropriate)	☐	☐	☐	☐
19. summarized (or had class members summarize) the content of the program	☐	☐	☐	☐
20. obtained student feedback on students' understanding of the program	☐	☐	☐	☐
21. obtained student feedback on their evaluation of the program	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive FULL, or N/A responses. If any item receives a NO, or PARTIAL response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

Learning Experience III

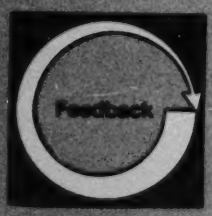
FINAL EXPERIENCE

In an actual school situation,* present information with videotaped and/or televised materials.

As you plan your lesson(s), decide when a videotaped and/or televised presentation could be used effectively to aid you in meeting the lesson objectives. Based on those decisions, present information with videotaped and/or televised materials. This will include—

- selecting, modifying, or developing a lesson which includes the use of a videotaped and/or televised presentation
- selecting, obtaining, preparing, and previewing the necessary materials
- securing the necessary equipment
- presenting the lesson to the class

NOTE: Your resource person may want you to submit your written lesson plan to him/her for evaluation before you present your lesson. It may be helpful for your resource person to use the TPAF from Module B–4, *Develop a Lesson Plan*, to guide his/her evaluation.



Arrange in advance to have your resource person observe your lesson presentation(s).

Your total competency will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 35–36.

Based upon the criteria specified in this assessment instrument, your resource person will determine whether you are competent in presenting information with videotaped and/or televised materials.

*For a definition of "actual school situation," see the inside back cover.

NOTES

TEACHER PERFORMANCE ASSESSMENT FORM

Present Information with Televised and Videotaped Materials (C–27)

Name _____

Date _____

Resource Person _____

Directions: Indicate the level of the teacher's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Televised Materials The teacher:	N/A	None	Poor	Fair	Good	Excellent
1. arranged the physical setting in advance in a way that would ensure that all students could both see and hear the presentation clearly	☐	☐	☐	☐	☐	☐
2. had equipment and materials assembled in advance	☐	☐	☐	☐	☐	☐
3. set up equipment according to manufacturer's recommendations	☐	☐	☐	☐	☐	☐
4. prechecked and prefocused the equipment	☐	☐	☐	☐	☐	☐
5. used programs which met the following criteria: a. aided in meeting the objective(s) of the lesson	☐	☐	☐	☐	☐	☐
b. content was interesting and motivating	☐	☐	☐	☐	☐	☐
c. content was at students' comprehension level	☐	☐	☐	☐	☐	☐
d. content fit the needs and interests of students	☐	☐	☐	☐	☐	☐
e. content was accurate and up to date	☐	☐	☐	☐	☐	☐
f. technical quality of the program was good	☐	☐	☐	☐	☐	☐
6. prepared students adequately for the program	☐	☐	☐	☐	☐	☐
7. presented the program at a logical point in the lesson	☐	☐	☐	☐	☐	☐
8. summarized (or had class members summarize) the content of the program	☐	☐	☐	☐	☐	☐
9. obtained student feedback on students' understanding of the program	☐	☐	☐	☐	☐	☐
10. obtained student feedback on their evaluation of the program	☐	☐	☐	☐	☐	☐

Videotaped Materials

The teacher:	N/A	None	Poor	Fair	Good	Excellent
11. arranged the physical setting in advance in a way that would ensure that all students could both see and hear the presentation clearly	☐	☐	☐	☐	☐	☐
12. had equipment and materials assembled in advance	☐	☐	☐	☐	☐	☐
13. set up equipment and threaded the recorder according to manufacturer's recommendations	☐	☐	☐	☐	☐	☐
14. prechecked and prefocused the equipment	☐	☐	☐	☐	☐	☐
15. used programs which met the following criteria: a. aided in meeting the objective(s) of the lesson	☐	☐	☐	☐	☐	☐
b. content was interesting and motivating	☐	☐	☐	☐	☐	☐
c. content was at students' comprehension level	☐	☐	☐	☐	☐	☐
d. content fit the needs and interests of students	☐	☐	☐	☐	☐	☐
e. content was accurate and up to date	☐	☐	☐	☐	☐	☐
f. technical quality of the program was good	☐	☐	☐	☐	☐	☐
16. prepared students adequately for the program	☐	☐	☐	☐	☐	☐
17. presented the program at a logical point in the lesson	☐	☐	☐	☐	☐	☐
18. paced the presentation according to the needs of the lesson and of the students	☐	☐	☐	☐	☐	☐
19. summarized (or had class members summarize) the content of the program	☐	☐	☐	☐	☐	☐
20. obtained student feedback on students' understanding of the program	☐	☐	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

ABOUT USING THE CENTER'S PBTE MODULES

Organization

Each module is designed to help you gain competency in a particular skill area considered important to teaching success. A module is made up of a series of learning experiences, some providing background information, some providing practice experiences, and others combining these two functions. Completing these experiences should **enable** you to achieve the **terminal** objective in the final learning experience. The final experience in each module always requires you to demonstrate the skill in an actual school situation when you are an intern, a student teacher, or an inservice teacher.

Procedures

Modules are designed to allow you to individualize your teacher education program. You need to take only those modules covering skills which you do not already possess. Similarly, you need not complete any learning experience within a module if you already have the skill needed to complete it. Therefore, before taking any module, you should carefully review (1) the Introduction, (2) the Objectives listed on p. 4, (3) the Overviews preceding each learning experience, and (4) the Final Experience. After comparing your present needs and competencies with the information you have read in these sections, you should be ready to make one of the following decisions:

- that you do not have the competencies indicated, and should complete the entire module
- that you are competent in one or more of the enabling objectives leading to the final learning experience, and thus can omit that (those) learning experience(s)
- that you are already competent in this area, and ready to complete the final learning experience in order to "test out"
- that the module is inappropriate to your needs at this time

When you are ready to take the final learning experience **and** have access to an actual school situation, make the necessary arrangements with your resource person. If you do not complete the final experience successfully, meet with your resource person and arrange (1) to repeat the experience, or (2) complete (or review) previous sections of the module or other related activities suggested by your resource person before attempting to repeat the final experience.

Options for recycling are also available in each of the learning experiences preceding the final experience. Any time you do not meet the minimum level of performance required to meet an objective, you and your resource person may meet to select activities to help you reach competency. This could involve (1) completing parts of the module previously skipped; (2) repeating activities; (3) reading supplementary resources or completing additional activities suggested by the resource person; (4) designing your own learning experience; or (5) completing some other activity suggested by you or your resource person.

Terminology

Actual School Situation . . . refers to a situation in which you are actually working with, and responsible for, secondary or post-secondary vocational students in a real school. An intern, a student teacher, or an inservice teacher would be functioning in an actual school situation. If you do **not** have access to an actual school situation when you are taking the module, you can complete the module **up to** the final learning experience. You would then do the final learning experience later; i.e., when you have access to an actual school situation.

Alternate Activity or Feedback . . . refers to an item or feedback device which may **substitute** for required items which, due to special circumstances, you are unable to complete.

Occupational Specialty . . . refers to a specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity).

Optional Activity or Feedback . . . refers to an item which is not required, but which is designed to **supplement** and enrich the required items in a learning experience.

Resource Person . . . refers to the person in charge of your educational program; the professor, instructor, administrator, supervisor, or cooperating/supervising/classroom teacher who is guiding you in taking this module.

Student . . . refers to the person who is enrolled and receiving instruction in a secondary or post-secondary educational institution.

Vocational Service Area . . . refers to a major vocational field: agricultural education, business and office education, distributive education, health occupations education, home economics education, industrial arts education, technical education, or trade and industrial education.

You or the Teacher . . . refers to the person who is taking the module.

Levels of Performance for Final Assessment

N/A . . . The criterion was not met because it was **not applicable** to the situation.
None . . . **No attempt** was made to meet the criterion, although it was relevent.
Poor . . . The teacher is unable to perform this skill or has only **very limited ability** to perform it.
Fair . . . The teacher is unable to perform this skill in an acceptable manner, but has **some ability** to perform it.
Good . . . The teacher is able to perform this skill in an **effective** manner.
Excellent . . . The teacher is able to perform this skill in a **very effective** manner.

Titles of The Center's Performance-Based Teacher Education Modules

A–1 Prepare for a Community Survey
A–2 Conduct a Community Survey
A–3 Report the Findings of a Community Survey
A–4 Organize an Occupational Advisory Committee
A–5 Maintain an Occupational Advisory Committee
A–6 Develop Program Goals and Objectives
A–7 Conduct an Occupational Analysis
A–8 Develop a Course of Study
A–9 Develop Long-Range Program Plans
A–10 Conduct a Student Follow-Up Study
A–11 Evaluate Your Vocational Program

Category B: Instructional Planning

B–1 Determine Needs and Interests of Students
B–2 Develop Student Performance Objectives
B–3 Develop a Unit of Instruction
B–4 Develop a Lesson Plan
B–5 Select Student Instructional Materials
B–6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

C–1 Direct Field Trips
C–2 Conduct Group Discussions, Panel Discussions, and Symposiums
C–3 Employ Brainstorming, Buzz Group, and Question Box Techniques
C–4 Direct Students in Instructing Other Students
C–5 Employ Simulation Techniques
C–6 Guide Student Study
C–7 Direct Student Laboratory Experience
C–8 Direct Students in Applying Problem-Solving Techniques
C–9 Employ the Project Method
C–10 Introduce a Lesson
C–11 Summarize a Lesson
C–12 Employ Oral Questioning Techniques
C–13 Employ Reinforcement Techniques
C–14 Provide Instruction for Slower and More Capable Learners
C–15 Present an Illustrated Talk
C–16 Demonstrate a Manipulative Skill
C–17 Demonstrate a Concept or Principle
C–18 Individualize Instruction
C–19 Employ the Team Teaching Approach
C–20 Use Subject Matter Experts to Present Information
C–21 Prepare Bulletin Boards and Exhibits
C–22 Present Information with Models, Real Objects, and Flannel Boards
C–23 Present Information with Overhead and Opaque Materials
C–24 Present Information with Filmstrips and Slides
C–25 Present Information with Films
C–26 Present Information with Audio Recordings
C–27 Present Information with Televised and Videotaped Materials
C–28 Employ Programmed Instruction
C–29 Present Information with the Chalkboard and Flip Chart

Category D: Instructional Evaluation

D–1 Establish Student Performance Criteria
D–2 Assess Student Performance: Knowledge
D–3 Assess Student Performance: Attitudes
D–4 Assess Student Performance: Skills
D–5 Determine Student Grades
D–6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

E–1 Project Instructional Resource Needs
E–2 Manage Your Budgeting and Reporting Responsibilities
E–3 Arrange for Improvement of Your Vocational Facilities
E–4 Maintain a Filing System
E–5 Provide for Student Safety
E–6 Provide for the First Aid Needs of Students
E–7 Assist Students in Developing Self-Discipline
E–8 Organize the Vocational Laboratory
E–9 Manage the Vocational Laboratory

Category F: Guidance

F–1 Gather Student Data Using Formal Data-Collection Techniques
F–2 Gather Student Data Through Personal Contacts
F–3 Use Conferences to Help Meet Student Needs
F–4 Provide Information on Educational and Career Opportunities
F–5 Assist Students in Applying for Employment or Further Education

Category G: School-Community Relations

G–1 Develop a School-Community Relations Plan for Your Vocational Program
G–2 Give Presentations to Promote Your Vocational Program
G–3 Develop Brochures to Promote Your Vocational Program
G–4 Prepare Displays to Promote Your Vocational Program
G–5 Prepare News Releases and Articles Concerning Your Vocational Program
G–6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
G–7 Conduct an Open House
G–8 Work with Members of the Community
G–9 Work with State and Local Educators
G–10 Obtain Feedback about Your Vocational Program

Category H: Student Vocational Organization

H–1 Develop a Personal Philosophy Concerning Student Vocational Organizations
H–2 Establish a Student Vocational Organization
H–3 Prepare Student Vocational Organization Members for Leadership Roles
H–4 Assist Student Vocational Organization Members in Developing and Financing a Yearly Program of Activities
H–5 Supervise Activities of the Student Vocational Organization
H–6 Guide Participation in Student Vocational Organization Contests

Category I: Professional Role and Development

I–1 Keep Up-to-Date Professionally
I–2 Serve Your Teaching Profession
I–3 Develop an Active Personal Philosophy of Education
I–4 Serve the School and Community
I–5 Obtain a Suitable Teaching Position
I–6 Provide Laboratory Experiences for Prospective Teachers
I–7 Plan the Student Teaching Experience
I–8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

J–1 Establish Guidelines for Your Cooperative Vocational Program
J–2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
J–3 Enroll Students in Your Co-Op Program
J–4 Secure Training Stations for Your Co-Op Program
J–5 Place Co-Op Students on the Job
J–6 Develop the Training Ability of On-the-Job Instructors
J–7 Coordinate On-the-Job Instruction
J–8 Evaluate Co-Op Students' On-the-Job Performance
J–9 Prepare for Students' Related Instruction
J–10 Supervise an Employer-Employee Appreciation Event

RELATED PUBLICATIONS

Student Guide to Using Performance-Based Teacher Education Materials
Resource Person Guide to Using Performance-Based Teacher Education Materials
Guide to the Implementation of Performance-Based Teacher Education

For information regarding availability and prices of these materials contact—

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